abcam

Product datasheet

Recombinant human TNIK protein ab119725

5 Images

Description

Product name	Recombinant human TNIK protein
Biological activity	ab119725 specific activity determined to be 68 nmol/min/mg.
Purity	> 95 % SDS-PAGE. The purity was determined to be 95% by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	Q9UKE5
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	67 kDa including tags
Amino acids	1 to 367
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab119725** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot Functional Studies SDS-PAGE
Form	Liquid
Additional notes	**ab64311** (Myelin Basic Protein protein) can be utilized as a substrate for assessing kinase activity

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.31% Glutathione, 0.002% PMSF, 0.003% DTT, 0.79% Tris HCl, 0.003% EDTA,

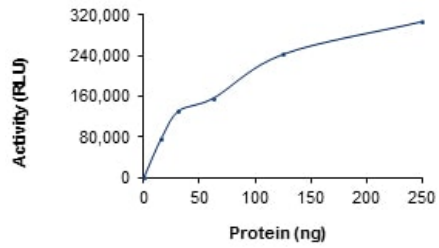
25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

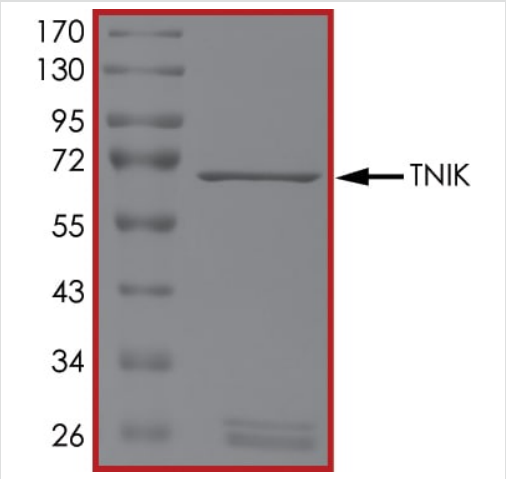
Function	Serine/threonine kinase that acts as an essential activator of the Wnt signaling pathway. Recruited to promoters of Wnt target genes and required to activate their expression. May act by phosphorylating TCF4/TCF7L2. Appears to act upstream of the JUN N-terminal pathway. May play a role in the response to environmental stress. Part of a signaling complex composed of NEDD4, RAP2A and TNIK which regulates neuronal dendrite extension and arborization during development. More generally, it may play a role in cytoskeletal rearrangements and regulate cell spreading.
Tissue specificity	Expressed ubiquitously. Highest levels observed in heart, brain and skeletal muscle. Expressed in normal colonic epithelia and colorectal cancer tissues.
Sequence similarities	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 CNH domain. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated. Autophosphorylation is activated by RAP2A and induces association to the cytoskeletal fraction.
Cellular localization	Nucleus. Cytoplasm. Recycling endosome. Cytoplasm > cytoskeleton. Associated with recycling endosomes and the cytoskeletal fraction upon RAP2A overexpression.

Images



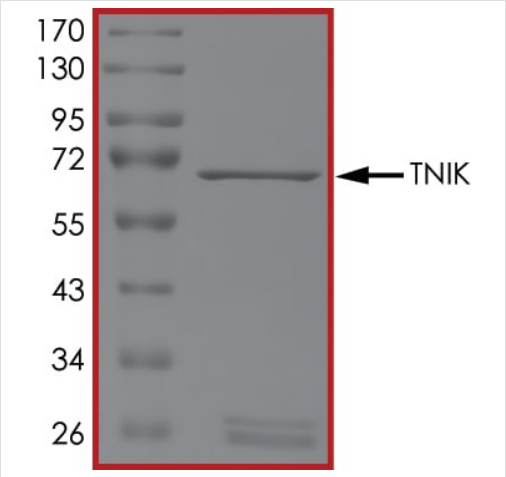
Functional Studies - Recombinant human TNIK protein (ab119725)

The specific activity of TNIK (ab119725) was determined to be 50 nmol/min/mg as per activity assay protocol and was equivalent to 58 nmol/min/mg as per radiometric assay



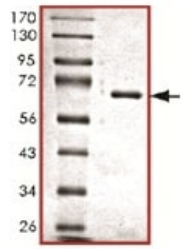
SDS-PAGE - Recombinant human TNIK protein (ab119725)

SDS PAGE analysis of ab119725



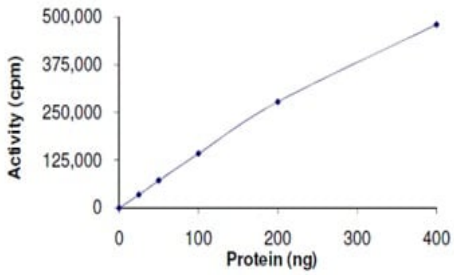
SDS-PAGE - Recombinant human TNIK protein (ab119725)

SDS PAGE analysis of ab119725



SDS-PAGE - Recombinant human TNIK protein (ab119725)

SDS Page analysis of ab119725



Functional Studies - Recombinant human TNIK protein (ab119725)

ab119725 specific activity determined to be 68 nmol/min/mg.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors